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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,390	11/05/2001	Zhong-Min Wei	21829/111 (EBC-009)	4469

7590 06/14/2005

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EXAMINER

PARA, ANNETTE H

ART UNIT PAPER NUMBER

1661

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,390

Applicant(s)

WEI ET AL.

Examiner

Annette H. Para

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-41, 81-85, 89-91, 93 and 100-108 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-41, 81-85, 89-91, 93 and 100-108 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 25-41, 81-85, 89-91, 93, and 100-108 are pending.

The finality of the office action dated 6/16/04 is withdrawn in light of the new rejection below.

The objection to claims 18 and 98 is withdrawn in light of Applicant's cancellation of the claims.

The rejection of claims 1-5, 7 and claims 75-79, under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1- 2, 5, 8, 11, 13, 15, 17, 19, of US Patent No. 5, 776, 889 is withdrawn in light of Applicant's cancellation of the claims.

The rejection of claims 1-5, 7 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No.09/835,684 is withdrawn in light of Applicant's cancellation of the claims and the abandonment of the Application 09/835,684.

Claim Rejections - 35 USC § 112

Claim Rejections - 35 USC § 112 2nd paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 100, 102, 103, 105, 106, and 108 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 100, 102, 103, 105, 106, and 108 are indefinite in the recitation "conditions that, in the absence of said treating". These conditions are not defined in the specification so it is unclear what the conditions are.

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Claims 37-41, and 91 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are drawn to cuttings that are not defined by genomic structure or by phenotypic characteristics, and therefore, the claimed invention lacks an adequate written description.

See *University of California v. Eli Lilly*, 119 F.3d 1567, 43 USPQ 2d 1405 (Fed. Cir. 1997), where it states:

[a] written description of an invention involving a chemical genus, like a description of a chemical species, "requires a precise definition, such as by structure, formula, [or] chemical name," of the claimed subject matter sufficient to distinguish it from other materials.

Therefore, given the lack of written description in the specification with regard to the structural and physical characteristics of the claimed compositions, it is not clear that Applicant was in possession of the genus claimed at the time this application was filed.

Claims 25-36, 81-85, 89-90, 93, and 100-108 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are broadly drawn to a method of treating cutting of a plant with a hypersensitive response elicitor protein derived from a plant pathogen.

There are at least 113 *Pseudomonas* species, including *P. abietaniphila*, *P. agarici*, *P. agarolyticus*, *P. alcaligenes*, *P. alcaliphila*, *P. alginovora*, *P. amygdali*, *P. anguilliseptica*, *P. andersonii*, *P. asplenii*, *P. aurantiaca*, *P. avellanae*, *P. azelaica*, *P. azotoformans*, *P. balearica*, *P. batumici*, *P. borealis*, *P. brassicacearum*, *P. brenneri*, *P. cannabina*, *P. caricapapayae*, *P. cichorii*, *P. coronafaciens*, *P. cedrina*, *P. congelans*, *P. corrugata*, *P. chloritidismutans*, *P. chlororaphis*, *P. citronellolis*, *P. constantinii*, *P. cremoricolorata*, *P. denitrificans*, *P. diterpeniphila*, *P. extremorientalis*, *P. flavescens*, *P. ficuserectae*, *P.*

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filiscindens, *P. fluorescens*, *P. fragi*, *P. frederiksbergensis*, *P. fulgida*, *P. fulva*, *P. fuscovaginae*, *P. gessardii*, *P. gingeri*, *P. graminis*, *P. grimontii*, *P. halodenitrificans*, *P. halophila*, *P. hibiscicola*, *P. hydrogenovora*, *P. indica*, *P. japonica*, *P. jessenii*, *P. jinjuensis*, *P. kilonensis*, *P. koreensis*, *P. libanensis*, *P. lini*, *P. lundensis*, *P. lurida*, *P. lutea*, *P. luteola*, *P. mandelii*, *P. marginalis*, *P. mediterranea*, *P. meliae*, *P. migulae*, *P. mucidolens*, *P. marginata*, *P. meridiana*, *P. mendocina*, *P. monteillii*, *P. mosselii*, *P. nitroreducens*, *P. oleovorans*, *P. orientalis*, *P. oryzihabitans*, *P. pseudoalcaligenes*, *P. palleroniana*, *P. parafulva*, *P. pavonanceae*, *P. pertucinogena*, *P. proteolytica*, *P. psychrophila*, *P. resinovorans*, *P. poae*, *P. plecoglossicida*, *P. putida*, *P. rathonis*, *P. reactans*, *P. rhizosphaerae*, *P. rhodesiae*, *P. salomonii*, *P. stutzeri*, *P. syringae*, *P. savastanoi*, *P. straminea*, *P. synxantha*, *P. tolaasii*, *P. trivialis*, *P. tremae*, *P. taetrolens*, *P. thermaerum*, *P. thermocarboxydovorans*, *P. thermotolerans*, *P. thivervalensis*, *P. umsongensis*, *P. vancouverensis*, *P. veronii*, *P. viridiflava*, *P. wisconsinensis*, and *P. xiamenensis*. The instant specification only describes two hypersensitive response elicitors from one species.

There are at least 73 *Phytophthora* species, including *P. alni*, *P. andina*, *P. arecae*, *P. avicenniae*, *P. bisheria*, *P. boehmeriae*, *P. botryosa*, *P. brassicae*, *P. cactorum*, *P. cajani*, *P. cambivora*, *P. capsici*, *P. cinnamomi*, *P. citricola*, *P. citrophthora*, *P. clandestina*, *P. colocasiae*, *P. cryptogea*, *P. drechsleri*, *P. erythrosetica*, *P. europaea*, *P. fragariae*, *P. glovera*, *P. gonapodyides*, *P. hedraiaandra*, *P. heveae*, *P. hibernalis*, *P. humicola*, *P. idaei*, *P. ilicis*, *P. infestans*, *P. inflata*, *P. insolita*, *P. inundata*, *P. ipomoeae*, *P. iranica*, *P. katsurae*, *P. kelmania*, *P. lateralis*, *P. macrochlamydospora*, *P. meadii*, *P. medicaginis*, *P. megakarya*, *P. megasperma*, *P. melonis*, *P. mirabilis*, *P. multivesiculata*, *P. nemorosa*, *P. nicotianae*, *P. niederhauserii*, *P. palmivora*, *P. parasitica*, *P. phaseoli*, *P. pistaciae*, *P. polymorphica*, *P. porri*, *P. primulae*, *P. pseudosyringae*, *P. pseudotsugae*, *P. psychrophila*, *P. quercina*, *P. quininea*, *P. ramorum*, *P. richardiae*, *P. sinensis*, *P. sojiae*, *P. syringae*, *P. tentaculata*, *P. trifolii*, *P. tropicalis*, *P. uliginosa*, *P. undulata*, and *P. vignae*. The instant specification describes no hypersensitive response elicitors from any *Phytophthora* species.

There are at least 68 *Xanthomonas* species, including *X. albilineans*, *X. arboricola*, *X. axonopodis*, *X. bromi*, *X. campestris*, *X. cassavae*, *X. citri*, *X. codiae*, *X. cucurbitae*, *X. cynarae*, *X. fragariae*, *X. gardneri*, *X. hortorum*, *X. hyacinthi*, *X. melonis*, *X. oryzae*, *X. pisi*, *X. populi*, *X. sacchari*, *X.*

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theicola, *X. translucens*, *X. vasicola*, and *X. vesicatoria*. The instant specification only describes one hypersensitive response elicitor from one species.

There are at least 11 *Clavibacter* species, including *C. iranicus*, *C. michiganensis* subsp. *Insidiosus*, *C. michiganensis* subsp. *michiganensis*, *C. michiganensis* subsp. *nebraskensis*, *C. michiganensis* subsp. *sepedonicus*, *C. michiganensis* subsp. *tessellarius*, *C. rathayi*, *C. toxicus*, *C. tritici*, *C. xyli* subsp. *Cynodontis*, *C. xyli* subsp. *xyli*. The instant specification describes no hypersensitive response elicitors from *Clavibacter*.

There are at least 14 *Ralstonia* species including *R. basilensis*, *R. campinensis*, *R. eutropha*, *R. gilardii*, *R. insidiosa*, *R. mannitolilytica*, *R. metallidurans*, *R. oxalatica*, *R. paucula*, *R. pickettii*, *R. respiraculi*, *R. solanacearum*, *R. syzygii*, *R. taiwanensis*. The instant specification only describes one hypersensitive response elicitor from one species.

There are at least 13 *Erwinia* species including *E. dacicola*, *E. amylovora*, *E. aphidicola*, *E. billingiae*, *E. chrysanthum*, *E. mallotivora*, *E. papayae*, *E. persicina*, *E. psidii*, *E. pyrifoliae*, *E. rhapontici*, *E. toletana*, *E. tracheiphila*. The instant specification only describes one hypersensitive response elicitor from one species.

Applicant does not describe other hypersensitive response elicitors encompassed by the claims, and the structural features that distinguish all such proteins from other proteins are not provided.

Because the proteins are not described within the full scope of the claims, the method of using the proteins to impart desiccation resistance to cuttings is likewise not described within the full scope of the claims, and the specification fails to provide an adequate written description of the claimed invention.

Therefore, given the lack of written description in the specification with regard to the structural and functional characteristics of the compositions used in the claimed methods, it is not clear that Applicant was in possession of the claimed genus at the time this application was filed.

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Conclusion

No claim is allowed.

Future Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette H Para whose telephone number is (571) 272-0982. The examiner can normally be reached Monday through Thursday from 5:30 a.m. to 4:00 p.m.

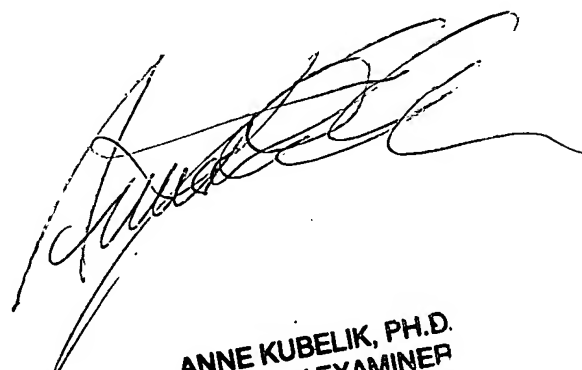
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Wang, can be reached on (571) 272-0811. The fax number for the organization where the application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about PAIR system, see <http://pair-direct.uspto.gov> . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Annette H Para

June 9, 2005



ANNE KUBELIK, PH.D.
PRIMARY EXAMINER